Amendment

In the abstract:

Amend the abstract to read as follows:

A method for joining high temperature superconducting components for use in a superconducting cable while minimizing critical current degradatino is provided. The articles formed have critical currents that are at least 80% of the critical current of the high temperature superconducting components. The invention further provides splicing geometries that facilitate helically or otherwise bundling wires into cables with minimal critical current degradation and without kinking or flexion of the joined components.

In the specification

Please insert the following paragraphs before the first full paragraph at page 13:

The cryostat **40** shown comprises a layer **41** of insulating material, formed, for instance, by several surface-metallized tapes (some tens) made of plastics (for instance, a polyester resin), known in the art as "thermal superinsulator," loosely wound, with the possible help of interposed spacers **43**. Such tapes are housed in an annular hollow space **42**, delimited by a tubular element **44**, in which a vacuum in the order of 10^{-2} N/m^2 is maintained by means of known apparatuses.

The tubular element **44** made of metal is capable of providing the annular hollow space **42** with the desired fluid-tight characteristics, and is covered by an external sheath **45**, for instance made of polyethylene.

In the claims:

Please cancel claims 16-29, and amend claims 1 and 5 to read as follows:

1. A superconducting cable, comprising:

(a) a core member; and